

SEQUENCE PROTOCOL

5 <110> Degussa-Hüls AG
 Forschungszentrum-Jülich GmbH
 <120> New nucleotide sequences coding for the thrE gene and process
 for the enzymatic production of L-threonine with coryneform
 bacteria.
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 <170> Patent Proprietor Publication 2.1
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 <213> Corynebacterium glutamicum ATCC14752
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 25 <221> CDS
 <222> (398)..(1864)
 <223> thrE-Gen
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 30 (A list of gene sequences is given at Line 30, German page 23 to Line
 36, German page 31.)
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 35 agccaagggga aaagaaagcc cctaagcccc gtgttattaa atggagactc tttggagacc 120
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 40 tggagaagag acttgaactc tcaacctacg cattacaagt gcgttgcgct gccaatgctg 240
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 50 ctt cgt ggc cgc att tca aca gtt gac gct gca aaa gcc gca cct ccg 463
 Leu Arg Gly Arg Ile Ser Thr Val Asp Ala Ala Lys Ala Ala Pro Pro
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 cca tcg cca cta gcc ccg att gat ctc act gac cat agt caa gtg gcc 511
 55 Pro Ser Pro Leu Ala Pro Ile Asp Leu Thr Asp His Ser Gln Val Ala
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 ggt gtg atg aat ttg gct gcg aga att ggc gat att ttg ctt tct tca 559
 60 Gly Val Met Asn Leu Ala Arg Ile Gly Asp Ile Leu Leu Ser Ser
 40 45 50
 ggt acg tca aac agt gat acc aag gtg caa gtt cga gcg gtg acc tct 607
 65 Gly Thr Ser Asn Ser Asp Thr Lys Val Gln Val Arg Ala Val Thr Ser
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0990079 BT

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	Thr Ile Phe Thr Asn Ile Gly Val Glu Arg Lys Met Pro Val Asn Val	
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20	gtt gcc gag aaa att ctg gac gag ttg gag caa tcg cct gcg tct tat	847
	Val Ala Glu Lys Ile Leu Asp Glu Leu Glu Gln Ser Pro Ala Ser Tyr	
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	Lys Pro Ser Gln Ile Ile Ala Ser Gly Ile Val Val Leu Leu Ala Gly	
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55	ttg aca ctt gtg caa tct ctg cag gac ggc atc acg ggc gct ccg gtg	1183
	Leu Thr Leu Val Gln Ser Leu Gln Asp Gly Ile Thr Gly Ala Pro Val	
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	Thr Ala Ser Ala Arg Phe Phe Glu Thr Leu Leu Phe Thr Gly Gly Ile	
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	Met Leu Pro Ala Met Glu Ser Ala Ala Ala Pro Asn Tyr Ser Ser Thr	
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	Phe Ala Arg Ile Ile Ala Gly Gly Val Thr Ala Ala Ala Phe Ala Val	
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 Gly Cys Tyr Ala Glu Trp Ser Ser Val Ile Ile Ala Gly Leu Thr Ala
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 Val Ser Ala Ala Ala Ile Ala Ala Thr Ala Val Gly Phe Thr Gly Gly
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15 ttg ctt gcc cgt cga ttc ttg att cca ccg ttg att gtg gcg att gcc 1567
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20 ggc atc aca cca atg ctt cca ggt cta gca att tac cgc gga atg tac 1615
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 Ala Leu Ala Thr Ala Ser Ser Leu Ala Ala Gly Val Val Leu Gly Glu
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30 tgg att gcc cgc agg cta cgt cgt cca cca cgc ttc aac cca tac cgt 1759
 Trp Ile Ala Arg Arg Leu Arg Arg Pro Pro Arg Phe Asn Pro Tyr Arg
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35 gca ttt acc aag gcg aat gag ttc tcc ttc cag gag gaa gct gag cag 1807
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 Asn Lys Arg

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099079 BT

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<210> 2

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<212> PRT

15 <213> Corynebacterium glutamicum ATCC14752

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 35 40 45
 Asp Ile Leu Leu Ser Ser Gly Thr Ser Asn Ser Asp Thr Lys Val Gln
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 30 Val Arg Ala Val Thr Ser Ala Tyr Gly Leu Tyr Tyr Thr His Val Asp
 65 70 75 80
 Ile Thr Leu Asn Thr Ile Thr Ile Phe Thr Asn Ile Gly Val Glu Arg
 85 90 95
 35 Lys Met Pro Val Asn Val Phe His Val Val Gly Lys Leu Asp Thr Asn
 100 105 110
 Phe Ser Lys Leu Ser Glu Val Asp Arg Leu Ile Arg Ser Ile Gln Ala
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 Gly Ala Thr Pro Pro Glu Val Ala Glu Lys Ile Leu Asp Glu Leu Glu
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 45 Gln Ser Pro Ala Ser Tyr Gly Phe Pro Val Ala Leu Leu Gly Trp Ala
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 Met Met Gly Gly Ala Val Ala Val Leu Leu Gly Gly Gly Trp Gln Val
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 50 Ser Leu Ile Ala Phe Ile Thr Ala Phe Thr Ile Ile Ala Thr Thr Ser
 180 185 190
 Phe Leu Gly Lys Lys Gly Leu Pro Thr Phe Phe Gln Asn Val Val Gly
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 Val Val Leu Leu Ala Gly Leu Thr Leu Val Gln Ser Leu Gln Asp Gly
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	Gly Leu Leu Ala Arg Arg Phe Leu Ile Pro Pro Leu Ile Val Ala Ile	
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45	gtt gct tta gcc act gct tca tca ctt gcc gct ggc gtg gtt ttg ggt	1590
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1909

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<210> 4

<211> 489

<212> PRT

<213> Corynebacterium glutamicum ATCC13032

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<400> 4

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Asp Ile Leu Leu Ser Ser Gly Thr Ser Asn Ser Asp Thr Lys Val Gln
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Val Arg Ala Val Thr Ser Ala Tyr Gly Leu Tyr Tyr Thr His Val Asp
 65 70 75 80

Ile Thr Leu Asn Thr Ile Thr Ile Phe Thr Asn Ile Gly Val Glu Arg
 85 90 95

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Lys Met Pro Val Asn Val Phe His Val Val Gly Lys Leu Asp Thr Asn
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Phe Ser Lys Leu Ser Glu Val Asp Arg Leu Ile Arg Ser Ile Gln Ala
 115 120 125

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Gly Ala Thr Pro Pro Glu Val Ala Glu Lys Ile Leu Asp Glu Leu Glu
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Met Met Gly Gly Ala Val Ala Val Leu Leu Gly Gly Gly Trp Gln Val
 165 170 175

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Ser Leu Ile Ala Phe Ile Thr Ala Phe Thr Ile Ile Ala Thr Thr Ser
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Phe Leu Gly Lys Lys Gly Leu Pro Thr Phe Phe Gln Asn Val Val Gly
 195 200 205

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Gly Phe Ile Ala Thr Leu Pro Ala Ser Ile Ala Tyr Ser Leu Ala Leu
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 245 250 255

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Leu Phe Thr Gly Gly Ile Val Ala Gly Val Gly Leu Gly Ile Gln Leu
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